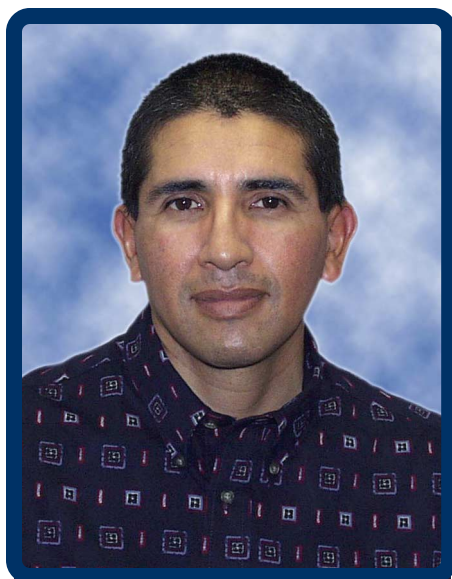




Aerospace Engineer



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Hopes and dreams are what NASA is made of and it is my privilege to be counted among the many explorers who keep it this way. However, with all exploration there is risk and it is my job to ensure these risks are minimized. I receive great satisfaction and pleasure in being able to be involved with many of NASA's programs through the Systems Management Office. In system management, we act as the wide-angle lenses for the program scientists, engineers and administrators by helping them maintain a global view of their work. This way a programs risk are identified and managed so that its chances of success are maximized. It is a job that fosters and requires a person to have balance in many disciplines and therefore carries over into all aspects of your life. I believe it is a job that many people would enjoy because it allows you to grow in many ways.

Areas of expertise:

- Aerodynamics
- Heat transfer
- Risk Management
- Systems Management

How I first became interested in this profession:

As a young boy growing up in the San Joaquin Valley I was captivated by the hawks that flew over the grain fields and dreamt of the freedom flight must bring. By age 6, I began to read about flying and started building my own airplane and rocket models. Most of my models ended up crashing, but I learned a lot about flight by these early experiences.

What helped prepare me for this job:

I used the long solitary hours of farm work to think, daydream, plan, and visualize my future. I viewed everything as a challenge including school, athletics, and work, and set goals for myself. Striving for these goals allowed me to maintain my strengths and decrease my weaknesses. Using this philosophy, I worked towards balance and harmony in every aspect of life (I may not achieve these states, but my journey maintains the life of my dreams and brings me closer to them). In essence...this is the "systems" approach.

My role models or inspirations:

My parents encouraged and supported me in everything I did, but most importantly, they showed me how to value and respect knowledge, people, and the environment. I also used the example set forth by astronaut Michael Collins in his autobiography "Carrying the Fire." I admired his self-assessment as a regular guy who, because of timing and location, had unique opportunities, which he made the best of by becoming the first person to orbit the moon alone.

My education and training:

- B.S. in Aeronautical Engineering, California Polytechnic State University, (Cal Poly), San Luis Obispo, CA
- Ph.D. and M.S. in Mechanical Engineering, University of California, Berkeley
- National Test Pilot School and numerous other professional training courses

My career path:

- Seven years as a flight test engineer with the United States Air force
- Four years in graduate school
- Three years as an associate with the National Research Council
- Four years and counting as an aerospace engineer with NASA

What I like about my job:

Since my job is multi-disciplinary, it hardly ever gets boring, and I use many fundamental skills I learned in school (pencil, eraser and calculator type skills). My work requires study and the use of many resources: books, calculators, computers, and other people's expertise. I work with some very good people! My current job allows me to make significant and immediate contributions to NASA's mission.

What I don't like about my job:

I do not like decisions that trade resources at the expense of science and technology for politics. However, when viewed globally, politics become another component of the system, and such decisions become understandable and even necessary.

My advice to anyone interested in this occupation:

Strive for a balanced life, and overcome your limitations with education. Recognize that information and knowledge by itself do not constitute an education. Curiosity must be applied to the information in order to reach an understanding, and this process is what constitutes an education. Therefore, approach all things with an open mind and embrace the unknown as an opportunity to increase your education and reach your goals.